

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-2 (canceled)

Claim 3 (currently amended): A method for delivering a biologically active molecule protein, enzyme, vitamin, vaccine, transcription factor, hormone, carbohydrate, lipid, or nucleic acid into a cell comprising: 1) covalently linking a molecule to the cell surface, wherein the molecule can act as a surface receptor, 2) complexing the biologically active molecule protein, enzyme, vitamin, vaccine, transcription factor, hormone, carbohydrate, lipid, or nucleic acid with a ligand for the surface receptor, and 3) contacting the biologically active molecule protein, enzyme, vitamin, vaccine, transcription factor, hormone, carbohydrate, lipid, or nucleic acid -ligand complex with the cell surface, whereby the biologically active molecule protein, enzyme, vitamin, vaccine, transcription factor, hormone, carbohydrate, lipid, or nucleic acid is delivered into the cell, wherein the covalently linked molecule is biotin and the ligand is avidin or streptavidin.

Claims 4-8 (canceled)

Claim 9 (previously presented): A composition comprising a nucleic acid-polyethyleneimine-avidin complex, wherein the polyethyleneimine is covalently linked to avidin or streptavidin.

Claim 10 (original): The composition of claim 9, wherein the nucleic acid is selected from the group consisting of DNA and oligonucleotide.

Claims 11-18 (canceled)

Claim 19 (canceled) The method of claim 3, wherein the biologically active molecule is not fluorescein.

Claim 20 (new claim): A method for delivering a biologically active molecule or a fluorescein molecule into a cell comprising: 1) covalently linking a second molecule to the cell surface, wherein the second molecule can act as a surface receptor, 2) complexing the ~~biologically active molecule~~ first molecule with a ligand for the surface receptor, and 3) contacting the ~~biologically active molecule~~ first molecule-ligand complex with the cell surface, whereby the ~~biologically active molecule~~ first molecule is delivered into the cell, wherein the covalently linked molecule is biotin and the ligand is avidin or streptavidin, and wherein the first molecule is not fluorescein.